



Release Notes

Release Version 1.3.2

Version 1.3.2.442 – April 30, 2008

Control4 is continuing to improve the functionality of our hardware and software through periodic system software releases. The 1.3.2.442 update release provides two specific changes. This update affects only the Control4 system software. A new version of Composer is not required. The 1.3.2.438 version of Composer continues to be the most recent version of Composer software. If you are not experiencing problems with these specific problems resolved, there is no need to re-update a previously updated 1.3.2 system.

All new installations and updates from prior versions will default to 1.3.2.438.

Due to underlying system software changes, it is not possible to use Update Manager to downgrade a system from 1.3.2.442 to a prior version. If you need to downgrade a device, you will need to utilize the Control4 Recovery – USB utility.

Changes for this release of 1.3.2 include:

- Resolved problem with the Sony CX-777ES 2-way driver where the auto scan functionality was not correctly identifying and providing meta data for inserted DVDs in some situations.
- Corrected problem that could occur with the on-board serial interface on the HC-300 and HC-500 controllers picking up spurious data from the surrounding environment.

Version 1.3.2.438 – February 26, 2008

Changes for this release of 1.3.2 include:

- Driver for the Home Controller HC-500. To make the HC-500 driver show up in your default list, right click in the My Drivers tab and select "Restore Default List."
- When installing and using the Home Controller HC-500, please be aware of the following important information:
 - The digital coax audio input (SPDIF) should only be used with sources that output at 48 kHz sample rate – otherwise the sound will be tinny and there may be gaps in the audio stream. This limitation will be removed in a future system software release. Most devices with SPDIF output will default to 48 kHz. An example to the contrary is a DVD player with SPDIF output playing a CD (sampled at 44.1 kHz).

- The digital coax audio output (SPDIF) on the HC-500 is not available with the 1.3.2 system software release. This audio output will be made available with a future system software release.
- The HC-500 audio output 1 and audio output 3 are limited by hardware to output at the same sample rate. This could potentially cause problems with the 1.3.2 system software if both outputs are being used and either 1 or 3 is attempting to output at different sample rates. This could happen if a digital audio (MP3) selection is being output (44.1 kHz sample rate) on either port and any analog source connected to an audio input (e.g. a tuner or a satellite receiver) is being output (48 kHz sample rate) through the other. The manifestation of this issue will be tinny audio quality. For best results in a 1.3.2 system, we recommend that you not use both audio output 1 and audio output 3. This limitation will be resolved in a future system software release.
- The HC-500 has component video output which can be used to connect to either a high definition (720p) or standard definition (NTSC or PAL) monitor. There are two component bindings available in Composer. The correct output mode is set when you make the connections binding in Composer.
- The HC-500 is configured by the factory to output video on the composite / s-video video output ports. In this mode, there will also be a video signal on the component output. However, it will not have the correct colors. If you want to use the standard definition component output, please make the connection bindings in Composer. That will cause it to select the appropriate output mode for standard definition component displays.
- If you choose to migrate existing media from to an HC-500, you want to connect your computer to the network via a physical Ethernet connection rather than a WiFi connection. When moving large amounts of data, dropped connections and network congestion make the WiFi connections less reliable and slower.
- The Easy Importer utility is included with the HC-500 and the HC-1000 controllers. It is only licensed for customers who have purchased these controllers.
- When adding an HC-500 as a master controller to an existing system, make sure that you do the following (for additional information see the Tech Bulletin regarding Migrating Master Controllers at <http://forums.control4.com/tm.aspx?m=33399>)
 - First, make a full backup of the existing project file.
 - Clear the project file from the existing master controller.
 - Connect to the HC-500 and load the saved project file.
 - Add the HC-500 device to the project and Identify it.
 - Make sure that Zserver is running on only one controller.
 - Ensure that all other controllers, navigators, and ZigBee devices are identified and online.

- Update the HC-500 and the rest of the system to 1.3.2.438.
 - Be aware that if you move existing media to the HC-500, you will need to recreate any playlists which include that media. When the media is moved, the Media ID changes and the linkage to the playlist will be broken. If you move your media, the playlist needs to be manually recreated. We are evaluating solutions for this limitation in the future.
- Other system software changes with the 1.3.2.438 release include:
 - Changed code page installed in system software on the HC-300, HC-500, and HC-1000 controllers to better support international (specifically latin extended) characters in media file names.
 - Modified Composer's controller property page to better reflect the status of an offline ZigBee Server.
 - Modified the system startup script run on the HC-300 and HC-500 controllers to show the system startup status on the video output.
 - Corrected system lockup which could occur if a Network Attached Storage device went offline while Control4 was streaming from it.
 - Decreased the startup time required for the HC-300.
 - Resolved crash which could occur when adding an HC-300 controller to a project running on an HC-1000.
 - Changed smb.conf file on all touch screens to resolve problem with cover art not displaying on Navigator in some circumstances.
 - Resolved a problem with the handling of nested subfolders on a network attached storage device which caused media to not play.
- With the 1.3.2.438 release, we have added 2-way drivers for the following devices:
 - Denon AVR-3808CI Receiver (Serial and TCP/IP)
 - BK Components CT300.3, CT600.1, and CT600.3 Amplifiers (Serial and TCP/IP)
 - BK High Definition Video Switcher (Serial and TCP/IP)
 - Sony DA3300ES Receiver (Serial)

Version 1.3.2.318 – November 15, 2007

Changes for this release of 1.3.2 include:

- Driver for the Home Controller HC-1000. To make the HC-1000 driver show up in your default list, right click in the My Drivers tab and select "Restore Default List."
- When adding an HC-1000 to an existing system, make sure that you do the following (for additional information see the Tech Bulletin regarding Migrating Master Controllers at <http://forums.control4.com/tm.aspx?m=33399>)
 - First, make a full backup of the existing project file.

- Clear the project file from the existing master controller.
 - Connect to the HC-1000 and load the saved project file.
 - Add the HC-1000 device to the project and Identify it.
 - Make sure that Zserver is running on a slave controller.
 - Ensure that all other controllers, navigators, and ZigBee devices are identified and online.
 - Update the HC-1000 and the rest of the system to 1.3.2.318.
 - Verify that the 3rd-party AV devices in the system are all being controlled correctly. We have noticed that in some cases the increased speed of the HC-1000 processor can subtly change the timing of power on delays and delays in IR macros.
 - Be aware that if you move existing media to the HC-1000, you will need to recreate any playlists which include that media. When the media is moved, the Media ID changes and the linkage to the playlist will be broken. If you move your media, the playlist needs to be manually recreated. We are evaluating solutions for this limitation in the future.
- Corrected the pulse relay configuration on the HC-300 driver so that the relay can be operated in pulse mode.
 - Fixed Ademco BP security panels driver to allow for status feedback from zones above 10 to work correctly.
 - Resolved digital audio Now Playing queue being cleared by a timer after additional music had been added to the queue.

Version 1.3.2.298 – October 31, 2007

- Driver for the Multi-Channel Amplifier - V3. To make the Amp V3 driver show up in your default driver list, right click in the My Drivers tab and select "Restore Default List"
- Updated firmware for the Multi-Channel Amplifier – V3. ***Your Amp V3 must have its firmware updated after installation. The Control4 system will automatically execute this update after it is added to the project. However, it must be connected via TCP/IP in order to be updated. If you are planning on using the ZigBee transport for control of the Amp V3, you must plan to first connect and configure it using TCP/IP. The firmware will be updated to 00.08.14.*** After the firmware has been updated you can reconfigure the Amp V3 to communicate via ZigBee.
- Driver for the Home Controller HC-1000 (beta)
- Support for Carrier / No Carrier / Carrier Inverted modes of Direct Connect IR now provided (requires running a Windows application to modify the device's .c4i file) – this application will be published via a Technical Bulletin on the Control4 dealer forum and is also available via Technical Support.
- Resolved HC-300 audio and DMA contention that could cause memory or file system corruption.

- Added smb.conf file to all touch screen devices to resolve improper netbios resolution on some networks that caused cover art not to display.
- Wakeup agent now clears all timers for the wakeup scene when disabled; this allows the wakeup to be turned off prior to the second scene executing. If the wakeup is turned off and then immediately back on, the second scene will not execute (because it has been cleared) but it will be ready to execute on the following day.
- Corrected problem which could cause the CONNECT and INPUT serial macros to be concatenated on one-way serial drivers.
- Resolved problem that could cause the 10.5" Wireless Touch Screens to lose their WiFi configuration after an update.
- Resolved problem that caused Network File Storage devices with an apostrophe in the directory path to not stream digital audio.

Version 1.3.2.234 – August 22, 2007

- Updated WiFi driver on Mini Touch Screens and Speaker Points to resolve b/g WAP negotiation problem which caused devices not to connect to WAP and caused WiFi devices to not finish updating
- Updated WiFi driver to resolve hang with Dlink AP
- Resolved problem where the Multi-Tuner driver was losing the ability to tune to even frequencies
- iPort driver list retrieval on large lists has been made more robust resolving problems with iPort interface hanging on list retrieval
- Improved the ability for the HC-300 to access audio and photo storage off of Network Attached Storage devices when the HC-300 is the master controller. Resolved system lockup caused by network errors.
- Resolved problem with the editing of power on delay not working correctly in Composer Driver Wizard
- Resolved problem with AM band selection on zTuner driver
- Resolved problem with Global Cache driver device identification algorithm
- Resolved Mini Touch Screen volume tracking problem where encoder knob was unable to control volume with certain receivers as volume endpoint
- Resolved the volume control display only going up to 99% when using the knob on the Mini Touch Screen
- Resolved a problem with the HC-300 being unable to sync with some HD video projectors
- Resolved problem with Windows file shares that were not browsable being unmounted
- Resolved problem with the On Screen navigator requiring two "4" button presses to regain focus after the screen saver was activated when a Pool driver was loaded in the project.

- Resolved a problem where a direct connect IR driver bound to an IR output on the HC-300 would all of the HC-300's IR outputs and leave them that way (inverted, no carrier). In that condition, no IR control could happen.

Version 1.3.2.230 – August 3, 2007

- Resolved problem with the updating of firmware on the Multi-Channel Amplifier, the Audio Matrix Switch, the Multi Tuner, and the Contact Relay Extender
- Control4 Recovery utility now available
- Resolved problem with Extron AV switch drivers not loading

Original Release – July 23, 2007

These Release Notes contain an overview of the changes in the 1.3.2 release. For additional information about the new features and capabilities of 1.3.2, please refer to the integrated Help in Composer 1.3.2 or the new product training on the web at <http://control4.webex.com>.

This document includes the following information:

- New features available in Release 1.3.2
- Do I Need to Update?
- Latest Firmware Versions
- Detailed Change List
- Detailed Update Instructions
- Control4 Contact Information

Please review this information prior to making the decision to update your customers' systems to 1.3.2. We believe you'll find 1.3.2 to be the most powerful and highest quality release yet from Control4. These Release Notes provide an overview of the changes which you should expect with this software update. If you encounter any issues during or following the update, please contact Technical Support if you need assistance.

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New Features in Release 1.3.2

Software Enhancements

- IP Camera driver and Navigator support
- Photo Screen Saver
- Screen Saver enhancements
- iPort driver
- Wakeup Agent configuration on System Remote Control and LCD Keypad
- Jandy and Pentair pool controller drivers and Navigator support
- Bass, Treble, Balance configuration support for Control4 Speaker Point
- Several variable handling improvements
- Media Scene enhancements
- Support for Microsoft's Vista operating system (with some limitations)
- Other enhancements (as detailed later in this document)

The 1.3.2 Release has several new features. However it is also a maintenance release and resolves defects encountered in previous releases. These improvements are documented in this document.

The 1.3.2 Release is a complete system software release. All Control4 devices have new software and/or firmware *{not all devices require new firmware – see firmware list for details}*. The update process will require updating all devices in the entire Control4 system.

Hardware

- The release of the Home Controller HC-300 will coincide with the release of 1.3.2. The HC-300 requires 1.3.2 system software.
- The release of the 10.5" Wireless Touch Screen v2 will coincide with the release of 1.3.2. It requires 1.3.2 system software.

Third-party drivers

- Ademco BP security panel driver
- ADT/Honeywell Vista-ICM module
- Card Access InHome Wireless Contact Relay
- Card Access InHome Wireless Motion Sensor
- DSC IT-100 security panel automation module
- Global Cache – Serial/IR extender (updated driver)
- IP Camera driver for Axis (various models)
- IP Camera driver for Panasonic (various models)
- iPort driver
- Jandy Aqualink pool controller
- Parasound zTuner
- Pentair pool controller
- VLinx ESP901 and ESP904

Do I need to update my customers to 1.3.2?

It is not necessary for you to update your customers' systems to 1.3.2. However, if your customer would like to utilize the new capabilities provided in 1.3.2 or purchases the HC-300 or 10.5" Wireless Touch Screen v2, you will need to update their system to 1.3.2. Also, if your customer is experiencing any of the limitations or defects of a previous release, you will be able to improve their experience by updating them to the 1.3.2 Release.

If you have a customer on a prior version system and you want to add new hardware, you will need to update their system to 1.3.2 first and then add the new hardware to the system. For best results, if you are installing any 1.3.2 hardware or software, Control4 will require that you update the entire system to 1.3.2.

Composer version 1.3.2 is backwards compatible with 1.3.x systems. It is not backwards compatible with version 1.2.x systems. When you install Composer 1.3.2 it will install into a separate directory. Previous versions of Composer will still be on your Windows system. If you do not need these prior versions, you may uninstall using Windows Add/Remove Programs. If you have customers running 1.2.x version systems, Composer 1.2.5 should be used for any maintenance and configuration work you do on their system.

Customers who have purchased Composer Home Edition will need to update their software to obtain the new capabilities of the 1.3.2 release, notably Photo Screen Saver support. Information about how to update Composer HE to 1.3.2 will be sent to all Control4 dealers who have customers with Composer HE 1.3.1.

Can I continue to install 1.3.1 systems?

For a limited period of time, both 1.3.1 and 1.3.2 will be available for installations. If you would like to install 1.3.1, you may do so using the Advanced options of Update Manager. Simply select Update Manager, Update, Advanced, and pick the 1.3.1 version from the menu.

Firmware Versions for 1.3.2 System Software

This table lists the firmware versions released with 1.3.1 and with 1.3.2 for all devices:

<i>Control4 Device</i>	<i>Firmware Version</i>
Front panel for Matrix Switch, Multi Channel Amplifier, and Multi Tuner	00.01.07 (1.3.1) 00.01.07 (1.3.2) <i>No Change</i>
Matrix Switch	00.07.11 (1.3.1) 00.07.14 (1.3.2)
Multi Channel Amplifier	00.07.06 (1.3.1) 00.07.13 (1.3.2)
Contact Relay Extender – ZigBee	00.03.02 (1.3.1) 00.03.04 (1.3.2)
Contact Relay Extender – Ethernet	00.03.10 (1.3.1) 00.03.13 (1.3.2)
Multi Tuner	00.03.20 (1.3.1) 00.03.22 (1.3.2)
Wireless 2-, 3-, 6-Button Keypads	01.10.11 (1.3.1) 01.10.11 (1.3.2) <i>No Change</i>
System Remote Control v1	01.04.09 (1.3.1) 01.04.10 (1.3.2)
System Remote Control version 2	01.01.07 (1.3.1) 01.01.09 (1.3.2)
Wireless Dimmer and Switch	01.10.23 (1.3.1) 01.10.23 (1.3.2) <i>No Change</i>
Wireless Outlet Dimmer and Switch	00.09.48 (1.3.1) 00.09.48 (1.3.2) <i>No Change</i>
Wireless LCD Keypad	00.04.07 (1.3.1) 00.04.07 (1.3.2) <i>No Change</i>
Ethernet LCD Keypad	00.02.20 (1.3.1) 00.02.20 (1.3.2) <i>No Change</i>
Wireless Thermostat	01.01.05 (1.3.1) 01.02.09 (1.3.2)

Detail of Changes in this Release

New functionality and major enhancements

- ***IP camera driver and Navigator support*** – The 1.3.2 release includes support for IP Security cameras. To add an IP camera driver to the system, use Composer, System Design, search Local Database, and select the appropriate driver for your camera.
- ***Photo screen saver*** – The photo screen saver is configured in Composer. You first will add the screensaver agent (Agents, Add). You may configure the agent to access from the media controller, from a USB hard drive, or from a network file share. You then add the photos to the screen saver using the Media tab of Composer. When Composer adds photos to the storage device it pre-scales them to the resolution of all the navigator interface devices. We preserve the aspect ratio of the original photo and box the extra space for any given screen size with bars. After the photo screen saver has been configured using Composer, it is enabled in Navigator interface (Info, Config, Screen Saver, Custom)
- ***Screen Saver enhancements*** – In addition to the photo screen saver, we have made several other improvements to the screen saver capability. You can now mix and match all screen saver options for each Navigator interface (Info, Config, Screen Saver, Custom). You can also use programming to change screen saver modes on any navigator in the system (Composer, Programming, Navigator actions)
- ***Media Scene enhancements*** – Several improvements have been made to the Media Scenes agent.
 - Composer now shows whether a Media Scene has been activated / deactivated
 - There are now conditionals associated with media scenes. You can program on "If Activated" or "If Deactivated".
 - There is a new programming command "TOGGLE_SCENE."
 - There is a new event "When Scene changes."
 - When a Media Scene is activated, it automatically chooses the most recently selected source for all scene rooms.
 - In programming, you can choose to activate a media scene based on a specific room (rather than most recently selected source).
 - Added support for discrete audio tracking across the media scene.
- ***10.5" Wireless Touch Screen performance improvement*** – We have made software changes which significantly improve the performance of the 10.5" Wireless Touch Screen.
- ***Multi Channel Amplifier and Audio Matrix Switch now support static IP addressing*** – Configure static IP addresses using the front panel of these devices. DHCP is still used during a device firmware update but static IP can now be used during normal operation.
- ***Wakeup Agent configuration on System Remote Control and LCD Keypad*** – Using the System Remote Control or LCD Keypad, you can now configure Wakeup events (Comfort, Wakeup)

- **Several variable handling improvements** – With 1.3.2 we made several enhancements which improve the use of variables in programming, including:
 - User-defined variables values are preserved across a normal system restart (this is primarily for preserving variables across an update process and is not guaranteed if the system shuts down abnormally, such as via a power outage)
 - You can now initialize variables or perform other programming at system startup with a system startup event (select the root of the project in Programming for the “When the project is loaded” event).
 - You can now define one variable to equal another variable. This can be used to save and restore variable values – for instance the level of a light or the music in a room (with discrete volume). After this value has been saved to the variable, you can restore the system variable to the value stored in the user variable.
 - You can now compare one variable to another variable – system variables and user variables can be compared.
- **Bass, Treble, Balance configuration support for Control4 Speaker Point** – In Composer, double click on the Speaker Point in either the System Design or the Connections pane to bring up the device control window for the Speaker Point.
- **Prevent custom drivers from being overwritten** – Anytime a 3rd-party driver is modified using the Driver Wizard it will now be saved with a different filename. This resolves the problem of customized drivers being inadvertently overwritten by drivers downloaded from the Control4 driver service.
- **iPort driver** – To add an iPort device to the system, use Composer, System Design, search Local Database, and select iPort. Then use Connections, Control/AV to bind the iPort to a serial port on a controller and bind the audio outputs of the iPort to audio inputs on a controller or to audio inputs on a Matrix Switch or Multi Channel Amplifier.
- **Jandy and Pentair pool controller** drivers and Navigator support – To add a pool controller driver to the system, use Composer, System Design, search Local Database, and select either Jandy or Pentair. Then use Connections, Control/AV to bind the pool controller to a serial port on a controller. After the controller has been added to the system, access the control interface through Composer, or any Navigator (House).
- **Support for Microsoft’s Vista** operating system – Composer, including Remote Director, now works when installed on Microsoft Vista. There are still some limitations, see the known limitations section of this document.

Significant changes in system behavior

Most functionality of the Control4 system in the 1.3.2 release is unchanged from the 1.3.1 version. However, as reported defects have been fixed, some behavior has changed in order to improve performance or reliability. You should be aware of the following changes which may be noticeable to your installers or the customer.

- **Default for digital audio changed to clear the Now Playing queue 5 minutes after the session has ended** – After a digital audio queue has finished playing and 5 minutes has elapsed, we will now automatically clear the Now Playing queue. If you want to change this behavior, it can be done in Composer, System Design, by selecting Digital Audio. You can disable this capability or change the delay time from 1 minute up to 24 hours.
- **Changed Mini Touch Screen encoding knob volume control behavior** – We received a lot of feedback about the way the Mini Touch Screen encoder knob worked when controlling volume. We have modified this behavior to give more control and to protect against runaway volume ramping (preventing volume changes after the encoder knob stops turning).
- **LED blinks green when identified** – The top LED on all lighting products (dimmers, switches and keypads) blinks green when they are identified. This allows the Installer to verify that they've been identified without seeing the Composer screen. This also causes a single LED blink when the system restarts.
- **Thermostat now has Auto Heat and Auto Cool modes** – The Auto mode allows the thermostat to dynamically change between heat and cool as needed. This basic functionality hasn't changed. However, in previous versions, when the user selected Auto mode, the thermostat chose which set point to display (heat or cool) based on whichever was closest to the currently measured temp. There was no way to adjust the other set point without leaving auto mode. The new behavior allows the user to see and adjust both the heat and cool set points while staying in auto mode.
- **New Button Animation Enabled option on 10.5" Touch Screens** – In order to give you an additional option to improve responsiveness of the 10.5" Touch Screens, we added an option (System Design) to disable the Button Animation. It doesn't affect the main menu buttons. It only removes animation from the submenu buttons.

Other Enhancements

This is a detailed listing of other improvements made with the 1.3.2 release.

- **System Startup event** – added a programming event when system starts. For example, you can use it to reset variables, or send e-mail.
- **Automatic backup and restore** – Added automatic backup and restore of DirectorState.xml. A project file backup is made each time Composer is backed up and restored if the DirectorState.xml ever becomes unusable. When DirectorState.xml becomes unusable it is moved to DirectorState.corrupt for inspection.
- **Refresh Navigators** – The Refresh Navigators command issued via Composer now refreshes the System Remote Control and LCD keypad interfaces as well as the GUI interfaces.
- **Audio devices with On Screen interfaces** – If an audio device has video bindings, the video path will now be selected when that device is selected. This allows audio devices with an on screen display to work with the Control4 System Remote control and their on screen interface.
- **Inspector** – We developed an Inspector utility to allow dealers/installers to verify that their installation is complete and that all packages have been correctly downloaded and installed. This utility will be documented with a Tech Bulletin for Dealers and Installers.
- **USB Restore Utility** – In order to allow dealers to restore devices to factory default configuration and to recover devices that had fatal errors, we create a USB-based utility that will reflash any IP device to Factory defaults (USB Restore). This utility will be made available shortly after the release of 1.3.2.
- **Improved calibration access** – Improved the sequence to recalibrate the Wireless Touch Screen (4-tap identify button on 10.5" Wireless Touch Screen v1 during "Loading, please wait") and Mini Touch Screen (hold down encoder button on bootup until you see calibration screen).
- **Improved device identification process** – Tightened up the device identification process so that devices don't get accidentally identified during the identify process; and, if a device is already identified, inform the installer of that when the identify button is pressed.
- **Added 4 button presses identify capability for more devices** – Allow the Amp, Switch, and Multi-Tuner to identify if the button is pressed 4 times (in addition to the 1-press identify).
- **Programmatic selection of screen saver modes** – provided programming to change the Navigator screen saver mode. For example you can change to Blank for night time operation
- **Switch Master Controllers** – Improved the ability to switch master controllers; please refer to Technical Bulletin on Switching Master Controllers for the approved and tested procedure
- **One-way serial Driver Wizard** – Added the ability to incorporate serial codes from a one-way serial driver into the macro section of the driver.

- **Thermostat Backlight activation** – When the Control4 Thermostat backlight is off, the first button press now activates the backlight without changing any thermostat settings.
- **Added read-only support for HFS file system (requires HC-300 controller)** – We have never previously supported the HFS+ (Apple iPod, Mac formatted) file system. In 1.3.2, we are adding read-only support for HFS+ formatted USB-attached devices. This will require an HC-300 and will not work with the HTC and MC.

We have previously supported USB-attached devices formatted with NTFS format as read-only devices within the Control4 system. This will continue to be the case on the HTC, the MC, and the new HC-300. There will not be any ability to write to an NTFS formatted USB-attached device.

- **Improved time synchronization** – Added a cron job that will run daily on the controller and navigator devices to synchronize devices with an NTP time server. This will ensure that time is correct on long-running systems
- **Other Enhancements** –
 - ZigBee and I/O Communications now available for logging in System Diagnostics
 - Added Zserver status to Composer, Network Status.
 - Since the recommended best practice is to backup the project file before updating a system, we added a prompt to backup project before initiating an update.
 - Improved the readability of programming when commands are sent to room by including room name in script
 - Added capability to programmatically change the WEB_URL on an installed Web Image driver

Specific Defects Resolved

We have identified and resolved (in 1.3.2) many defects in prior versions of the Control4 system. Many of defects were reported through Technical Support and the Control4 Dealer Forum. The following is a summary list of these defect fixes and/or preventative improvements made based on dealer feedback.

- On some network gear, we were seeing Control4 devices getting duplicate IP addresses with other devices on the network. We improved our detection and handling of duplicate IP addresses to prevent this causing downtime.
- When a Navigator device (controller running On-Screen, Mini Touch Screen, or 10.5" Touch Screen) is identified in a project, it will automatically connect to that Director and store that configuration for the future.
- We added JFFS2 file system checking to all devices with a JFFS2 file system. This check runs at device startup and also prior to loading an update. When a device detects that a potential JFFS2 corruption exists it will place an error message on the GUI display for 30 seconds and then will continue to load. This condition will also be logged by Update Manager if detected during the update process. This detection can't distinguish between a catastrophic corruption or an intermittent problem. Intermittent problems are generally cleared up by a system restart and are not something to worry about. If a device doesn't continue to update or load when the JFS101A error is displayed, try to power cycle that device. If that doesn't clear the condition, we have a USB Restore capability which can be used to reflash the device to factory default condition.
- Changed the priority of ripping and converting CDs on the Media Controller to not interfere with other system processes. If a failure occurs during the ripping process, the process will be allowed to continue rather than stopping. Also resolved problem where ripped CDs on a Media Controller never converted to MP3 format.
- If an AMG search errors out, the Media Controller will proceed on without hanging on the incomplete search request.
- Re-enabled the backup of project capability in Composer ME
- Changed the mapping of the LCD keypad Scan +/-, Tune +/-, and Next/Back to better work with the Control4 and 3rd-party tuners.
- Fixed Remote control not correctly reflecting dimmer light level when selected through keypad shortcut
- Media added and scanned into controller is now available on Navigators right away.
- Improved the detection of offline USB media and ensured that it isn't displayed on the Navigator interfaces.
- Resolved problem where samba mounts weren't created when DHCP startup took too long.
- DSC security panels can now contain a "0" in their arm/disarm code.

- Modified Navigator on slave controllers to not show white screen when connecting to master controller.
- Resolved the problem with not being able to select 'Broadcast Video' in programming.
- Resolved problem with the GE Concord 4 security panel not arming or disarming from the on screen interface in some situations.
- If a controller is configured for static IP, we will now automatically configure static DNS.
- Resolved problem of cover art not showing up on Navigator with some network configurations
- Thermostat –
 - Resolved problem where Tstat could only be programmed in Fahrenheit units even after it had been changed to use Celcius
 - Resolved occasional problem with Tstat going to Hold mode when units were switched to/from Fahrenheit/Celcius
 - Modified Thermostat programming interface to accept multiple commands correctly
- When a dealer/installer edits a downloaded driver, we now automatically save it as a new driver so that it can't be inadvertently overwritten by a later download of that same driver from the Control4 web service.
- Improved the detection of On/Off state when using a device with the Outlet Switch configured for power sensing; use this to ensure the device is turned on or off as requested by the user.
- Corrected Add/Remove Programs (in Windows) uninstaller for the Control4 USB Install utility to correctly remove the program.
- We added intelligence to the Multi Channel Amplifier firmware to protect against a blown power supply.
- Fixed IR code capture locks up Driver Wizard
- When a system (HTC primarily) is running low on internal storage space, Composer will notify the Installer that there's no room left to add media. If the HTC drive fills up while scanning media, scanning is aborted and Installer is notified.
- Fixed Navigators so that they wouldn't attempt to reconnect to the previous Director name after Director had been changed or the master controller renamed.
- Fixed a problem where Zserver could get into state where it didn't correctly communicate (DATAGRAM FAILS or DATAGRAM TIMEOUT) with a working ZigBee node until Zserver was restarted
- The LCD keypad can now control the volume of a media scene
- Properties page for v2 Remote would not show programming
- Corrected the start/stop dates for daylight savings time

- Corrected the problem where using the Next button in Composer when identifying dual transport devices caused the IP binding to be removed after identified
- Corrected rare condition which would cause Director not to restart after an update
- Resolved a timer issue which occasionally caused services on a slave controller to not correctly restart after update
- Changed all security panel drivers to display trouble text on Navigator screens when appropriate
- When Zserver is first started, it will now clear its nodes table to ensure that the devices in the project can load correctly
- Media screen saver was showing FM channel and RDS information when room was off in some circumstances
- Fixed the navigator display of dimmer level when dimmer level was set by the number keys on the System Remote Control
- Occasionally, due to a USB mount problem, the HTC internal storage would be loaded with MP3 files. Should this ever happen, these MP3 files are now cleaned up on reboot.
- Fixed the backlight off setting on Remote v2 to not shut off during List Navigator use
- Resolved a problem where occasionally the hardware wouldn't reboot correctly, requiring the device to be power cycled to correct.
- Improved the On Screen display interface to Now Playing to eliminate excessive "flicker" when scrolling.
- Corrected IR input for 3rd-party remotes not accepting channel up/down commands
- Resolved situation where if the devices.xml file (default devices in Composer) became corrupt, Composer wouldn't start.
- Added support for the "." (period) in HD channel selection.
- Resolved failure condition that occurred when a "bad" USB device was mounted which caused all subsequent device mounts to fail even if the device was "good" until the system was restarted.
- Improved the tolerance in software of the IR Input / IR capture on controllers.
- Added back the capability using the System Remote Control to sort the TV channel in on the screen navigator interface by pressing the Info button.
- Composer will now display an error message if for any reason a driver cannot be added to the system.
- Fixed MP3 media still showing as available even when USB device is removed
- Media scene will now shut off a room if it cannot play the selected source
- Improved the handling of mounted file systems for more reliable operation and detection of mounted and unmounted states.

- Resolved problem with List Navigator interfaces only showing one Genre when two with different capitalization (e.g. rock and Rock) were in the media database.
- Fixed problem where a different sample rate in an MP3 file would cause the controller to be out of sync with the endpoints.
- When a project is cleared in Composer, we will now disable Remote Access
- Fixed cause of Update Manager showed IP addresses and corrupted device name data in the View Logs interface
- Fixed Mini Touch Screen so that backlight programming levels received while in screen saver mode would properly take effect

Known Outstanding Limitations in 1.3.2

While most system software defects that were identified have been resolved in 1.3.2, there were some issues that couldn't be resolved with this release.

- **Composer running on Vista can't add media or pictures** – Composer running on Vista cannot add MP3 files or Photos to a USB storage device, a Network Storage device, or a slave Media Controller. We regret that this defect will not be fixed in the 1.3.2 release as it relates to an incompatibility between Vista and the version of Samba we are using on the controllers. You can still add MP3 files directly to the USB device, Network Storage device, or slave Media Controller and then scan using Composer running on Vista. To add Photos to these devices you will need to be running Composer on Windows XP.
- **Inadvertent overwriting of customized driver with Control4 defaults** – While we made changes in 1.3.2 to prevent drivers that have been edited within the project from being inadvertently overwritten by a Control4 provided driver, you still must exercise caution with projects edited with previous versions of Composer. If you have previously used Composer's Driver Wizard to modify an AV driver within the project and have not extracted the modifications and saved them with a new name, it is possible for you to lose those modifications. When a new driver for the same device is downloaded from the Control4 online database, it will overwrite any previous driver with the same name. To prevent this from happening you should export the customized driver and save it to a new name. That way you can easily access it and restore it if necessary.
- **Changing the name of an IP Camera** – There is a known issue with changing the name of an IP Camera in Composer. The device name is not updated on Navigator interfaces unless you also change something on the properties page of that camera. So, if you want to rename a camera, you must:
 1. Rename it
 2. Change something on the properties page
 3. Tab (or click) off that field
 4. Change it back
 5. Refresh Navigators
- **Side effects of Amplifier power supply protection** – New with 1.3.2, the Multi Channel Amplifier power supply protection in the firmware makes the amplifier much more resistant to power supply overload. However, if while the device is supporting multiple audio zones, the customer cranks up the volume on one zone, it could cause all of the zone outputs to be limited. This makes the audio signal quieter (instead of louder). Also, starting a new audio stream (causing previously unused outputs to become active) could send the amp into limiting mode, which would make pre-existing audio streams quieter. When an audio stream ends, any other active audio outputs will become louder if the amplifier was in limiting mode and exiting the stream reduces the load past the limit point. In some cases the limiting mode could actually result in the audio getting louder in a zone when the volume is turned down if this allows the limiting mode to be reduced.

- **Receiver drivers dated prior to December 2005 may lose their room bindings after being edited by the Driver Wizard.**

If you have any projects with a Receiver driver that is dated earlier than December 2005, Control4 suggests that you replace that driver with a current driver from the online database rather than edit it using the Driver Wizard. In the early days of Control4 (spring – fall of 2005) Receiver drivers were built with Room connections for both proxy devices in the driver (Receiver and Tuner). The room connection for the Tuner was unnecessary and was removed from the driver creation system before December 2005. When the Driver Wizard is used to modify a driver with two sets of Room connections, one set will be lost. The valid room connection can be replaced by the extraneous room connection and saved out that way in the edited .c4i file. This may not be noticed immediately. Since the original driver with those connections intact still exists in the running system's memory, no room bindings will be lost. The system will continue to run correctly until Director is restarted. At the point that Director restarts it will load the updated .c4i file; and since no valid room connections exist in the driver, the bindings to it will be deleted.

- **Home Theater Controllers with 128 MB of internal storage should not be used as master controllers in multi-controller projects** – Home Theater Controllers produced earlier than December 2005 had 128 MB of internal storage. Home Theater Controllers produced subsequent to that date have 256 MB of internal storage (use System Diagnostics, System Info, HTC, diskfree to check disk space) in the Home Theater Controller. Using a Home Theater Controller with 128 MB of internal storage as a master controller in a multi-controller system is not recommended. There is insufficient internal storage to allow Update Manager to update the entire system. There is no problem using an HTC with 128 MB of storage as a slave controller.
- **HC-300 analog output not exactly in sync with the analog output of the HTC or MC** – The analog audio output on the Home Controller HC-300 is not exactly in sync with the analog audio output of the Home Theater Controller or the Media Controller. This may be noticeable in sessions where the audio endpoints are served by both and the audio can be heard from both endpoints. This will be changed in a future release. Until then be aware of this limitation in your system design and ensure that adjacent rooms that will be joined in a digital audio session will not be served by a mix of HC-300 and HTC or MC.
- **Firmware on hybrid devices didn't update?** – The Multi Channel Amplifier, Audio Matrix Switch, Multi Tuner, and Contact Relay Extender can be configured using IP or ZigBee. However, in order to receive a firmware update, they must be configured and connected via IP. If they were previously configured as ZigBee and have been changed to IP, but are still not updating, you may need to restart Director (use System Manager to Disable and then Enable).
- **Scanning a large USB hard drive appears to hang Composer?** – If you attach a large capacity USB hard drive (230 GB of MP3s used in this example) to an HC-300 and scan that drive, Composer will appear to lock up and the system will appear to become unresponsive. This is not true. Though the system appears to be locked up, it is processing the data necessary to

perform the scan. After you press the Scan button, this scenario will play out as follows:

Preparing to scan, Director Status: Idle, Connected for a second then:

Preparing to scan, Director Status: Idle, Disconnected for about 60 seconds then:

Preparing to scan, Director Status: Comparing Files with Database for about 10 or more MINUTES then:

Scanning, Director Status: Idle, Connected for another couple of minutes then you will finally see albums populating in the list.

- **Static on Audio Output?** - Reminder, occasionally, after the device has just powered up, a Media Controller, Home Theater Controller, or Speaker Point will output static from one of the audio outputs when music is being played. This can be resolved by power cycling the device.

Update Instructions

Planning for the update

Your update experience from 1.3.0 or 1.3.1 will be straight forward. Systems that have been updated to or were installed with 1.3.0 or 1.3.1 may be updated remotely via Remote Access if they have been set up for Control4 4Sight Internet Services.

The update of a system from any 1.2.5 or prior version to Release 1.3.2 requires an on-site visit.

Be sure to plan your update so that you have adequate time to complete the update process. The time required for a complete update will vary depending on the size of the installation and the network bandwidth available. Here are some basic guidelines. Use your own experience to adjust as necessary.

- 15 - 30 minutes for pre-work
- 20 - 30 minutes to update the master controller, depending on network bandwidth.

Note: Media Controllers being updated from 1.2.x will take longer than Home Theater Controllers; they will take significantly longer if they have a lot of media ripped from the Media Controller CD tray. This is due to the conversion of ripped media and the media database during the update process.

- 20 - 40 minutes for all other IP devices on the network. Once the master controller has been updated, Update Manager will proceed with a concurrent update of all other IP devices (Media Controllers, Home Theater Controllers, 10.5" Wireless Touch Screens, Mini Touch Screens, and Speaker Points)
- ??? – you need to decide if there are capabilities you want to provide or project changes you want to make for the customer while you are on site and determine how much time to allocate.
- 15 - 30 minutes to finalize the install and acquaint customer with the system.
- 3 - 5 minutes for each device on the ZigBee network. Updates from 1.3.1 to 1.3.2 will take significantly less time because the Dimmer, Switch, and Keypad devices have the same firmware version. ZigBee devices are updated automatically. Because of the bandwidth constraints of the ZigBee network the firmware of these devices is updated sequentially. On large customer installations this can take a significant amount of time. For example, 100 devices to be updated could take from 5 – 8 hours to complete. You don't have to stay on-site while awaiting completion of the ZigBee device updates. But, the customer needs to be aware that until the overall update is completed, the system may be sluggish and quirky. System Remote Controls receive a priority update and will be the next device to update after they are awakened (a maximum of 2 Remote Controls will be updated at a time).

Update path recommendations

You may update any customer system, regardless of its current version, directly to 1.3.2.

Controllers & other IP devices can be updated from any prior version directly to 1.3.2 using Update Manager. The master controller in any system must be updated first. All other devices will then be automatically updated.

If you are updating a customer's system to Release 1.3.2 and also installing new hardware, we recommend that you first update their system to 1.3.2. Then you can install the additional hardware, add it to the project, identify it in Network Connections, and use Update Manager to update it.

There are no project format changes between 1.3.0, 1.3.1, and 1.3.2. Projects on systems that are at the 1.2.x version level will be converted automatically at the time they are updated to 1.3.1. All Control4 drivers are updated at the time of the update.

Projects on systems which are running on a version lower than 1.2.0 will need to be re-created in Composer 1.3.

Pre-work

An important part of the update process is to do the necessary pre-work. This becomes essential if you have any trouble with the update. If you've properly backed up your customer's project and ensured that their digital audio files are backed up, you can recover from almost any failure. If you don't do these things, and something goes wrong, you may have to manually recreate their project, scan and edit their media collection, or even rip digital audio files from their CD collection.

1. Make sure that the system is currently operational.
2. Make sure that all of the IP devices and ZigBee devices that you will be updating are identified and online by checking in Network Status under the Tools menu in Composer.
3. Back up the current project file with media using the version of Composer that corresponds with their system version. Save the backup project file with a name that clearly identifies it.
4. Optional: Back up the media stored on the media controller. If you, or the customer, have invested any time in ripping MP3 files using the Media Controller, you want to make sure that they have a backup copy of these files. Like any computer storage media, the hard drive on the media controller could fail. If it does, and there isn't a backup copy of the media available, there is no recovery path other than re-creating their collection. The audio files can be accessed using the Media Controller's shared directory. These can be accessed on your Windows PC by entering the Media Controller's IP address in the address bar in Windows Explorer (e.g. <\\192.168.0.100\\media\\audio> insert the correct IP address for the customer's controller). Back up these files by copying all directories to your PC hard drive or other storage medium.

Install Composer 1.3.2

1. The URL for the Composer package download is available on the download page at www.control4.com. You will be required to log in using your dealer ID.
2. Save install package from the URL provided to your local hard drive
3. Install Composer 1.3.2. It will install into a new directory. Composer 1.3.2 does not overwrite any previous versions of Composer. If you have customers running pre-1.3 versions of Control4 system software, you will want to leave Composer 1.2.5 on your system so that you can service their systems. ***You should not use a 1.2.x version of Composer to modify a 1.3.x system. Likewise, you should not use a 1.3.x version of Composer to modify a 1.2.x system.***

Update system to release 1.3.2

1. After Composer 1.3.2 is installed, you will use Update Manager (Composer, Tools, Update Manager) to update the system.
2. **For systems running 1.3.0 or 1.3.1.** You can use the Internet update, the USB update, or Remote Access to initiate the update to version 1.3.2.
 1. To update to 1.3.2 via the Internet, use Update Manager. You should see that 1.3.2 is available. Use the standard Update Manager methodology to start and execute the update.
 2. To use the USB Install method, make sure that you have a USB flash drive formatted FAT32 which has at least 170 MB free space.
 1. Download the USB Install program from the Dealer download page.
 2. Run the program to place the USB Install packages on your USB flash drive.
 3. Insert the USB flash drive into the master controller.
 4. Start the update using any graphical Navigator interface (Info, Update) or via Composer, Update Manager.
 3. Please note that if you want to use Remote Access to update a Control4 system to 1.3.2, it has to be configured and connected to Control4's 4Sight Internet Services.
 1. Make your connection to the customer's system using Remote Access by selecting the customer's system using Composer's Remote Director option.
 2. Verify that the devices on the system are online and connected by using Tools, Network Status.
 3. Make a backup – without media. The amount of data contained in the full media backup precludes a full backup with media over 4Sight.
 4. Start the update to 1.3.2 using Update Manager.
 5. When the controller shuts down to install the updated software packages, your Remote Access connection will no longer be valid.

Manually close Composer at that point. You can then log back in to Composer Remote Access and reconnect when the controller is done updating and connected back to 4Sight.

3. For systems currently running 1.2.5 or prior versions:

1. Because Update Manager has not been installed on the pre-1.3 system, the first phase of the update deals just with installing Update Manager on your master controller.
2. The controller will restart twice on a Media Controller update. The first thing to be updated is the Linux operating system. Then, 1.3.2 is installed along with update manager. The update dialog will show you the progress of the update throughout this process. If for some reason the dialog becomes disconnected before the 1.3.2 update is installed, you will need to reconnect to Director using Composer and re-start the update process.
3. Wait for the download, package install, and the reboot to finish. It can take longer than you might expect for the controller to reboot after the updated 1.3.2 software has been installed. Media Controllers will take longer than Home Theater Controllers; they will take significantly longer if they have a lot of media ripped using the Media Controller CD tray. The media database and any media ripped on the media controller are converted during this phase of the Update process.
4. You can close the update dialog and reconnect to Director after the dialog tells you "Update Complete."
4. Open Composer 1.3.2 and connect to Director. After the master controller has updated and rebooted it will appear in the Local Director selection dialog window. Connect to Director and open Update Manager to check progress of the updates on the rest of the system.

Continuing the update

1. You can not make project changes while the Update is progressing. The project file is locked until the IP devices' Update is completed. If you need to make changes, you can select "Cancel Pending." This will cancel the update on all devices which haven't already begun to install update packages. Canceling an update may leave the system in an unstable state with devices running different versions of software. After making changes, you will want to restart the update so all devices will be updated to the same version.
2. You can monitor the status of the Update process via Update Manager. Update Manager will automatically update all of the IP-connected devices that are in your project and available (identified and online). These include the Media Controller, Home Theater Controller, 10.5" Wireless Touch Screen, Mini Touch Screen, and Speaker Point.
3. Update Manager is done updating the IP-connected devices when current version is correct for all devices – status will show as Idle.

Updating the Multi-Channel Amplifier, Matrix Switch, Multi Tuner, and Contact Relay Extender

1. The Multi-Channel Amplifier, Audio Matrix Switch, Multi Tuner, and Contact Relay Extender cannot be updated over ZigBee. Note: they should not be connected over both ZigBee and Ethernet at the same time.
2. If they're configured for ZigBee, disconnect them. Then connect them via Ethernet and identify. They will be automatically updated at that time.
3. You can verify the firmware version on each of these devices in System Design by selecting that device.
4. After they are updated, these devices can be disconnected from the Ethernet network and re-identified using ZigBee.

Updating the firmware on ZigBee devices

1. The ZigBee Server (zserver) will automatically update all ZigBee devices on the system which are identified, online, and on the same channel as zserver. These devices include the 2- 3- and 6-Button Keypads, Wireless Dimmer, Wireless Switch, Wireless Outlet Switch, Wireless Thermostat, Wireless LCD Keypad, and the System Remote Control.
2. Because the ZigBee network is a low bandwidth network, the firmware on these devices is updated sequentially, two devices at a time. Plan for 3-5 minutes for each device on the network. On large installations this can take a significant amount of time to complete. For example, a 100 node ZigBee network could take between 5-8 hours to be fully updated.
3. You can check firmware version on ZigBee devices in Composer using Tool, Network Status, ZigBee Network. Click on the firmware column to sort this list by firmware version #.
4. System Remote Controls receive a priority update and are immediately queued for update when the Remote control is awakened. A maximum of two Remote Controls can be updated at a time.
5. The firmware changes between 1.3.0, 1.3.1, and 1.3.2 are mostly minor – the prior version devices will work fine in the 1.3.2 system before being updated with no user-detectable incompatibilities.
6. You don't have to remain at connected to the system throughout the ZigBee update process. As long as the devices are all identified and online, everything will update automatically.
7. The only behavior that the homeowner will notice in the home is that lights connected to dimmers will turn off for a couple of seconds then back on (if they were on to begin with) when the firmware is replaced. And, LEDs will flash when firmware is being replaced. System Remote Controls still work just fine to control the home even before they are updated. System performance will also feel somewhat sluggish while the ZigBee updates are in process.
8. You may wish to return several hours later or the following day to verify that the system is fully updated and is operating correctly. Alternatively,

you can use a 4Sight Remote Access connection to check on the system via the Internet and verify that the update process is complete.

Setting up 4Sight for Remote Access

1. Your customer will need a customer account at <http://my.control4.com>
 - Account Name
 - Email address
 - Password
 - If you are selected as the Dealer of Record for this account, the customer has the option to grant or disallow your dealer account access to the controller on their system.
 - New 4Sight accounts created beginning January 2007 will automatically be given a 90-day trial subscription for 4Sight services, including Remote Access, e-mail Agent, and Web Navigator.
2. Enable Remote Access
 - Remote Access is enabled through Composer (Tools, Configure Remote Access)
 - Or, it can also be enabled through any graphical navigator interface (Info, Remote Access)
3. Now you and your customer can log in to the system using Web Navigator for controllers connected via 4Sight
 - Login to my.control4.com – if there is a controller connected via 4Sight Remote Access, Web Navigator is automatically activated for viewing the status of and controlling the system.

Technical Support Contact Information

Please contact Control4 Technical Support if you require additional information or assistance:

Phone: 1-888-400-4072

Email: support@control4.com

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